209 AGGREGATE BASE COURSE

209.01 DESCRIPTION

This item shall consist of constructing a base course to the specified depth on a prepared foundation conforming to the lines, grades and cross sections shown in the contract documents.

209.02 MATERIALS

Materials shall conform to the requirements of one of the following:

Bank Run - 804.04(A)
Crushed stone - 804.04(B)
Recycled concrete - 804.04(C)

Note: Recycled material may not be used unless approved by the Engineer in areas where subsurface drainage problems exist in the roadbed and the roadbed soil is unstable. Recycled material shall not be used within undercut roadbed areas or over backfill in areas where unsuitable materials have been removed.

209.03 CONSTRUCTION REQUIREMENTS

Construction methods shall conform to the applicable provisions of 203 and the following:

Prior to placing new material, the existing grade shall be shaped and compacted until an in-place density of the upper 6 inches of roadbed (top 6 inches below subgrade) is obtained of not less than 93 percent under curb, gutter, sidewalk, driveway entrances, and alley entrances; 95 percent under roadway pavement area; and 100 percent if full depth of bituminous concrete pavement is to be used.

The minimum in-place density of existing and new soils base course, backfill for undercut areas and crushed stone base shall be 95 percent (95%) for PCC base, pavement or sidewalk, and l00 percent (100%) for bituminous concrete pavement.

Where the base course for new construction extends beyond the lateral limits of an old gravel or macadam roadway, and/or such a roadway exists within 1 foot of top of base course, the old roadway shall be plowed or scarified and the loosened material redistributed across the full width of the base course and compacted to the specified density, elevation, alignment, and cross section so that the soils foundation shall approach a condition of uniformity.

Except as required in excavating and replacing soft spots, the ground shall not be plowed, scarified, or disturbed below the base.

Proof rolling as defined in 203 is required.

209.04 PLACING

After the grade has been properly shaped and compacted the aggregate material shall be evenly placed and spread to a uniform depth without segregation. If the required compacted depth of the base course exceeds 6 inches, the base shall be compacted in 2 or more layers of approximately equal thickness. The maximum compacted thickness shall be 6 inches.

209.05 MIXING

After the material has been placed, water shall be added if needed to provide the optimum moisture content and the material uniformly mixed by means of a motor grader or other approved equipment.

209.06 SHAPING AND COMPACTION

Compaction shall continue until densities are obtained of not less than 95 percent under a rigid pavement and 100 percent under a bituminous pavement of maximum density determined in accordance with AASHTO T 180, Method D.

When hauling over the finished soils base results in ruts or any irregularities, the Contractor shall rework the aggregate base to the specified density, line, and grade. Tamping instead of rolling is prohibited.

Existing and new base course for sidewalk foundations shall be compacted to a density of 95 percent. Rollers used for compaction shall weigh not less than 5 tons. As directed by the Engineer, any unsuitable materials shall be removed and replaced with materials meeting the requirements of 804.04.

209.07 MEASURE AND PAYMENT

The unit of measure for Aggregate Base Course will be the cubic yard. The actual number of cubic yards of base course of variable dimensions, measured complete in place will be paid for the contract unit price per cubic yard, which payment will include all labor, materials, tools, equipment, and incidentals necessary to complete the work as specified herein.

If the Engineer determines volume measure to be inappropriate, a value of 3,800 pounds per cubic yard will be used to convert verified weights to a cubic yard basis.